

C. "MARKET SHARE" STATISTICS CITED BY PETITIONERS ARE LIKELY TO BE UNRELIABLE INDICATORS OF COMPETITIVE CONDITIONS

71. Petitioners present estimates of "market shares" calculated by Boardwatch magazine to support their claim that the proposed transaction will result in a significant increase in concentration. As discussed above, petitioners provide no evidence that shares calculated in this way, and changes in such shares, have any relationship to competitive conditions. Even a cursory review of these market share data, however, indicate that it is very unlikely that they are reliable indicators of concentration and competitive conditions in the industry, especially in light of the large scale and on-going entry.

72. Boardwatch's "market shares" for Internet backbone providers are based on connections reported by ISPs only. This measure indicates that MCI WorldCom (including UUNet, InternetMCI, ANS and Compuserve) will account for roughly 55 percent of such connections. The Boardwatch measure, however, is likely to be quite inaccurate. The methodology used by Boardwatch is not disclosed and there appears to be double counting of ISPs that are connected to more than one backbone. Moreover, "market share" data are unlikely to be a reliable indicator of competitive conditions in the provision of Internet backbone services. First, and foremost, such calculations fail to reflect the rapid entry and expansion in the provision of such services. Second, the number of ISP connections has no necessary relationship to the availability of network capacity or the ability of backbone suppliers to expand the provision of services and constrain price.

73. More narrowly, these calculations are based on ISP connections alone and do not incorporate information on non-ISP customers, such as direct customer connections to backbone providers. Thus, the Boardwatch data indicate that IBM (which principally markets Internet access directly to corporate customers) has a "market share" of only 0.29 percent.

PSINet, a significant backbone provider which typically serves subscribers through resellers which handle customer service, billing and marketing, is reported to have a market share of 0.7 percent.⁶² The Boardwatch measure undoubtedly understates the competitive impact of these firms.

D. THERE IS NO BASIS FOR CONCERNS THAT PEERING ARRANGEMENTS CAN BE USED TO HARM COMPETITION

74. Petitioners have suggested that peering arrangements can be used by MCI WorldCom to disadvantage its rival providers of Internet backbone services. There appears to be no economic basis for these concerns.

75. For reasons described above, it is unlikely that attempts by MCI WorldCom or others to disadvantage rivals through the use of peering arrangements could succeed due to: (i) the availability of many alternative providers of Internet backbone services; and (ii) the ability of ISPs to integrate into the provision of backbone services. The availability of such services is facilitated by the recent rapid entry of new firms and expansion of fiber optic capacity.

76. Petitioners' claims also appear to reflect a general misunderstanding of the economic function of peering.⁶³ Under such arrangements, two network providers agree not to price traffic they interexchange. Such arrangements are economically sensible only under circumstances in which peering partners provide to each other functions that are roughly comparable in value. In general, interconnection between networks may be priced. In such networks, interconnection fees provide a device for monitoring the value that the two networks provide to each other. Therefore, their existence cannot be interpreted as a reflection of market power.

62. Boardwatch Quarterly Directory, Fall 1997, p. 187.

63. We understand that this institutional arrangement developed as matter of convenience when Internet services were provided by non-profit organizations.

77. If two networks do not provide to each other functions that are roughly comparable in value, the use of peering arrangements may result in economic inefficiency. In such cases, the network that provides the more highly valued functions will not face the appropriate incentive to make investments in network capacity and neither will the network that receives the more highly valued functions.

V. CONCLUSIONS

78. This declaration evaluates competitive conditions in the provision of local exchange service, long distance services and Internet services and assesses the likelihood that the proposed transaction will adversely affect competition in the provision of these services. The evidence we have analyzed to date convinces us that the provision of local, long distance and Internet services today is marked by extensive entry, capacity growth and technological change.

79. These circumstances make it highly unlikely that the proposed transaction will adversely affect competition. Available evidence instead suggests that the proposed transaction will accelerate entry of CLECs, including both MCI WorldCom and others, into the provision of local services. Given the enormous size of this market and the high margins earned by incumbent suppliers, the transaction holds the promise of yielding very significant gains to consumers. There are also likely to be significant efficiencies in the provision of other services based on evaluations by WorldCom and industry analysts.

80. We also find significant shortcomings in the competitive analysis presented by petitioners. Among others, these include petitioners' failure to provide evidence supporting their claims that the transaction will result in harm to competition and their failure to address the effect on competition of the rapid changes now taking place in the telecommunications industry.

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EMPLOYMENT

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M.I.T., National Scholar Award, 1968
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Co-editor, Journal of Law and Economics, 1980 - present
Associate Editor, Regional Science and Urban Economics, 1987 - 1997
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Member, American Economics Association, Econometrics Society
National Bureau of Economic Research, Research Associate
Member, Advisory Committee to the Bureau of the Census, 1987 - 1990
Editorial Board, Intellectual Property Fraud Reporter, 1990 - 1995
Consultant on Merger Guidelines to the U.S. Department of Justice, 1991 - 1992
Accreditation Committee, Graduate School of Business, Stanford University, 1995
Visiting Committee, Massachusetts Institute of Technology, Department of Economics, 1995 - present
Resident Scholar, Board of Governors of the Federal Reserve System, Summer, 1995
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Testimony of Dennis W. Carlton in Re: Pontarelli Limousine, Inc. v. City of Chicago, Finance Docket No. 83-C-6716, September 25 & 26, 1989.

Deposition of Dennis W. Carlton in Re: Great Northern Nekoosa Corporation v. Georgia-Pacific Corporation: Before the United States District Court District of Connecticut, Civ. Action No. B-89-607-WWE, December 28, 1989 and January 15, 1990.

Testimony of Dennis W. Carlton in Re: The Matter of the Physicians and Surgeons Medical Malpractice Insurance Rates of St. Paul Fire & Marine Insurance Company: Before the State of Minnesota Office of Administrative Hearings for the Commissioner of Commerce, O.A.H. Docket No. 0-1004-3412-2, January 1990.

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Reply Affidavit of Dennis W. Carlton and George J. Stigler in Re: United States of American v. Western Electric Company Inc. and American Telephone and Telegraph Company: In the United States District Court for the District of Columbia, Civil Action No. 82-0192, January 10, 1991.

Testimony of Dennis W. Carlton in Re: Westreco, Inc. v. Commissioner of Internal Revenue: In the United States Tax Court, Washington, D.C. 20217, Docket No. 24078-88, January 29, 1991.

Deposition, Testimony, and Rebuttal Testimony of Dennis W. Carlton in Re: In the Matter of Marathon Oil Company and Phillips Petroleum Company: Before the Department of Revenue, State of Alaska, Case No. 89314, April 23 & 24, 1991 (Deposition), March 28, 1991, June 19, 1991 (Testimony), July 22, 1991 (Rebuttal Testimony) and October 3 & 4, 1991 (Oral).

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Deposition, Affidavit and Testimony of Dennis W. Carlton in Re: United States of America v. Brown University, et al.: In the U.S. District Court For the Eastern District of Pennsylvania, Civil Action No. 91-CV-3274, February 18 & 19, 1992 (Deposition), April 28, 1992 (Affidavit), and July 8 & 9, 1992 (Testimony).

Deposition of Dennis W. Carlton in Re: United States of America, People of The State of California, et al. v. J. B. Stringfellow, Jr., et al.: In the United States District Court Central District of California, No. CIV 83-2501 JMI, March 10 & 11, 1992.

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EMPLOYMENT

LEXECON INC., Chicago, Illinois (October 1985 - present): Vice President and Senior Economist.

U.S. COMMISSION ON CIVIL RIGHTS, Washington, D.C., (August 1984 - October 1985): Co-Director: Project on Minority Income Trends.

OFFICE OF POLICY: U.S. DEPARTMENT OF LABOR, Washington, D.C., (May 1982 - August 1984): Economist.

PRESIDENT'S TASK FORCE ON FOOD ASSISTANCE (on leave from U.S. Department of Labor), Washington, D.C., (September 1983 - February 1984): Research Associate.

OFFICE OF RESEARCH AND EVALUATION; BUREAU OF LABOR STATISTICS, Washington, D.C., (September 1980 - May 1982): Economist.

UNIVERSITY OF WISCONSIN, Madison, Wisconsin (1978 - 79): Teaching Assistant.

UNIVERSITY OF WISCONSIN, Madison, Wisconsin (1976 - 78): Science Writer

FIELDS OF SPECIALIZATION

Applied Microeconomics
Econometrics
Industrial Organization
Labor Economics

ARTICLES

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MISCELLANEOUS

University-Industry Dissertation Fellowship, University of Wisconsin, 1979-80.

Referee for: Review of Economics and Statistics; Journal of Labor Economics; Journal of Human Resources; Policy Studies Journal; National Science Foundation; Journal of Law and Economics; U.S. Department of Health and Human Services; Social Science Research Council; National Commission on Employment Policy; Journal of Legal Studies.

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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of)	
)	
Applications of WorldCom, Inc., for)	
Transfers of Control of MCI)	
Communications Corporation)	CC Docket No. 97-211
)	
)	
)	

DECLARATION OF ROBERT E. HALL

I. Introduction

1. I have been asked to prepare an economic analysis of the effects in the long-distance market of the proposed merger between WorldCom and MCI. My analysis is carried out within the framework of modern antitrust economics. That analysis looks to the interests of the consumer. A desirable merger will deliver superior products to the consumer at lower prices, compared to the situation in the market without the merger. An undesirable merger will reduce competition, resulting in inferior products and higher prices.

2. Merger analysis looks to market shares and to the effect of the merger on concentration, but these are intermediate steps and are useful to the extent that they help assess the effect of the merger on prices and innovation. The Merger Guidelines of the U.S. Department of Justice and Federal Trade Commission use market shares as a preliminary screening device. If a merger—such as the one proposed between WorldCom and MCI—has an immediate effect on market shares above the threshold, then the analysis proceeds to the next step, a full analysis of the effect of the merger from the consumer's perspective.

II. Relevant Markets for the Merger Analysis

3. The provision of long-distance services to users involves two vertically related markets. First is the upstream market for long-distance transmission capacity. With few exceptions, long-distance calls are carried over fiber-optic cables. Hence the upstream market is the market for long-haul fiber capacity. This market also serves other forms of communication, such as the Internet and corporate and government data networks.

4. Suppliers of long-distance services use long-haul capacity together with many other inputs to produce their services. Switching is a second important input, supplied in another upstream market. Local access is yet another input, still provided for the great majority of customers by the historical local phone company. Some sellers are vertically integrated in long-haul transmission, switching, and long distance, notably AT&T, MCI, Sprint, and WorldCom. Many other firms participate in one market or the other, and are either suppliers to or buyers from the active market in long-haul fiber capacity.

5. Purchasers of services in the long-haul fiber market include end users such as businesses and units of government, together with purchasers who use transmission capacity as an intermediate product—an input to long-distance service. The second group includes those who have their own switches and the switchless resellers of the services of other long-distance carriers.

6. As I will discuss later in this declaration, the customers for long-distance service fall into groups. It is useful to distinguish large, medium, and small business users, higher-volume residential users, and lower-volume residential users. In my opinion, these distinctions among types of customers do not create separate relevant markets for antitrust analysis, however. The boundaries of the relevant market are determined, in part, by substitution on the supply side. Because long-distance carriers who are currently active only in the business market are nonetheless capable of moving into the residential market, should higher prices in that market make the move attractive, the relevant market comprises both business and residential service. Moreover, because many business long-distance calls are made from home, the distinction between residential and business is blurred to begin with.